

What Is "Dia" Sizing on Tiruppur T-Shirts?



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In parts of the Tiruppur trade a T-shirt size is named by its "dia", the width across the chest of the knitted body in inches, together with a body length, rather than by S, M and L. In the one trade example we have, a medium is 17 inches dia and 26 inches long. Convert your grade chart into flat chest width and length in inches, send both systems side by side, and confirm the supplier's meaning on a sized sample before bulk.

The Short Version

- "Dia" names a T-shirt by its chest width in inches, given with a length, not by S, M or L.
- Our one trade example reads "M (17 inch dia chest and 26 inch length)". That only works as a flat width, not a full round.
- Convert your half-chest and length from centimetres to inches and send both systems in the tech pack.
- Confirm the measuring point and whether figures are before or after washing.
- Approve a sized sample set before bulk. A size misunderstanding is cheap to fix then and costly later.

"Dia" is how parts of the Tiruppur trade name a T-shirt size. It's the width across the chest of the knitted body, in inches, quoted together with the body length, so a size is written as something like "17 dia, 26 length" rather than "M". When a supplier asks for your sizes in dia, it wants your chart turned into those two numbers per size.

The evidence for this is thin, and I'd rather say so up front. It comes from a domestic bulk buyer of 10,000 to 50,000 pieces a month, who wrote in a Quora answer around 2018 that "the sizes are actually mentioned in 'Dia' in tiruppur", with the example "M (17" Dia chest and 26" length)" (from our forum-signal research, one old source, Reported). We found no second

source that sets the convention out, so treat this page as how to handle the word when it appears, and confirm the meaning with your own supplier. Because that source is a domestic buyer, dia may be mostly a domestic and stock-trade habit. Our reading is that an exporter making to a foreign brand's tech pack will work to your chart, but ask.

SourcingFrom Intelligence

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- 01 **Tiruppur sizes tees by chest "dia" plus length, not S-M-L.** A bulk buyer's example gives a medium as 17 inches dia and 26 inches length. *(Quora, about 2018, domestic bulk buyer, single old source)*
- 02 **The town is where you're most likely to meet it.** Tiruppur-side makers account for 44.6% of named Indian shippers in US sea bills for cotton T-shirts. *(US import bill-of-lading records, our analysis, 2026 · Verified counts)*

What we don't know yet

- ☐ Whether dia is used the same way across the town, or only in the domestic and stocklot trade. We have one voice.

1. Where Does "Dia" Come From?

From how the fabric is made. Most T-shirt jersey in a knit town is knitted on circular machines, which turn out cloth as a continuous tube. The trade talks about fabric by its "dia", meaning the size of that tube. Our source describes a T-shirt's dia as the tubular chest width, so the size is named after the width of the knitted body.

Our reading is that the word moved from the fabric to the garment because, for a body cut from tubular cloth, the tube width more or less is the chest. Whatever the history, the practical point is the same. In this usage a size is a pair of measurements, and the letters S, M and L may never come up.

2. Is Dia the Flat Width or the Full Round?

Almost certainly the flat width, in our example at least. Do the arithmetic on "M, 17 inch dia". If 17 inches were the full chest circumference, that would be a child's garment. Laid flat, 17 inches across means a chest of about 34 inches all the way round, which is a plausible slim domestic medium.

That still leaves room for confusion, so never assume. Western spec sheets usually give a half chest measured flat, at a set distance below the armhole. A supplier's dia may be measured at a different point, or describe the fabric tube rather than the finished garment. Ask them to say where they measure, in a sentence, and to mark it on a sketch.

3. How Do You Convert an S-M-L Grade Chart to Dia?

Take your chart's half-chest and body length in centimetres, divide by 2.54, and write both numbers per size. Here's a worked example using an imaginary chart, to show the method rather than recommend any measurements:

Your size	Half chest (cm)	Dia to send (inches)	Body length (cm)	Length
S	48	18.9	69	27.2
M	51	20.1	71	28.0
L	54	21.3	73	28.7
XL	57	22.4	75	29.5

Three rules make it work.

Send both systems. Keep your own size name, your centimetres and the inch conversion in the same row. If something drifts later, you can see which

number the factory followed.

Name the measuring points. Say where the half chest is taken and where the length starts, usually the high point of the shoulder. Ask the supplier to measure the same way.

Ask how they round. Your converted figures won't be whole inches. Ask whether the maker can hit the exact figure or will round to the nearest size it already knits. If the nearest one is too far off, ask what it would take to match your figure. The answer tells you how flexible that unit is for your order.

4. What Goes Wrong If You Skip It?

Usually nothing obvious until the bulk arrives. A maker that thinks in dia reads your "M" as its own medium, and its medium may not be yours. The example in our source, a 17-inch chest, is slimmer than many Western mediums, so a range sized by assumption can come out a size small across the board.

The second trap is washing. Cotton jersey can shrink after the first wash, and a measurement taken before washing isn't the same as one taken after. Agree in writing whether your numbers are before or after a wash, and put a shrinkage tolerance in the spec. How bulk drifts from an approved sample, and what stops it, is on sample perfect, bulk not.

The third is grading. Tiruppur isn't one big factory, and the unit that knits your fabric may not be the one that cuts and sews, as the [Tiruppur cluster page](#) explains. If the size chart lives only in an email to the exporter, the cutting unit may never see it. Ask who holds the chart on the floor.

5. What Should Your Tech Pack Say?

Five lines settle it:

1. **A size table** with your size name, centimetres and inches, side by side.
2. **Measuring points**, written and drawn, for chest, length, shoulder and sleeve.
3. **Tolerances** in both units, and whether measurements are before or after washing.
4. **Fabric spec** alongside, because the fabric decides how the body behaves. The product page on [cotton T-shirts from India](#) covers the tests to ask for.
5. **A sized sample set** to approve before bulk, at least one piece per size.

Our [RFQ template](#) has room for the size table, and the [sample evaluation checklist](#) covers checking a sized set when it arrives. If you want someone in Tiruppur to measure the sample set against your chart before you sign off, [SourcingSync](#) does that on the ground.

Questions Buyers Ask

What does "dia" mean on a T-shirt? ^

In the Tiruppur trade, the chest width of the T-shirt body in inches. It's given with a body length to name a size.

Is 17 dia a small or a medium? v

Do export factories in Tiruppur use dia? v

How do I convert centimetres to dia? v

Should I order in dia or in S-M-L? v

